



SKY SCOOP



Summer 1999

Issue 5

TORNADOES RIP THROUGH INDIANA AND OHIO ON APRIL 9, 1999

Thank You Spotters!!! The spotters of southeast Indiana and southwest Ohio are to be commended on providing us with timely and accurate information during this early morning tornado outbreak.

These tornadoes were the worst to hit the greater Cincinnati area since the 1974 Super-outbreak, which spawned the Saylor Park (F5) tornado among others in the Tri-State.

This outbreak took place in the early morning hours of April 9th as a storm system moved into Indiana and Ohio from the west. The first tornado in the NWS Wilmington, Ohio responsibility area touched down in the Jefferson Proving grounds in southwest Ripley county. The tornado proceeded to skip across southern Ripley county ranging in strength from F1 to F3. Damage included a destroyed mobile home, numerous well-built homes

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Destruction was extensive in parts of northeast Hamilton County Ohio. As you can see from this photograph, some homes experienced almost complete destruction. This photograph was taken by Mary Jo Parker, Warning Coordination Meteorologist at NWS Wilmington.

NWS WILMINGTON STAFF HAS GROWN TOGETHER

It has been about one year since the National Weather Service at Wilmington became a complete forecast office. Since then, our employees have had time to grow into a forecasting team.

New employees have been trained on the AWIPS (Advanced Weather Interactive Processing System) computer system. For

our new spotters, this new computer system replaced an older computer system dating back to the late 1970s. The forecasting tools and graphics are far superior to the former system. In fact, AWIPS will be used in the future for issuing short fused warnings (such as severe thunderstorm, tornado,

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THE FUJITA SCALE
(ASSESSING TORNADO STRENGTH)

F SCALE	WINDS (mph)	TYPE OF DAMAGE	FREQUENCY
F0	40-72	SOME DAMAGE TO CHIMNEYS, TV ANTENNAS, ROOF SHINGLES, TREES AND WINDOWS	29%
F1	73-112	AUTOMOBILES OVERTURNED, CARPORTS DESTROYED, TREES UPROOTED	40%
F2	113-157	ROOFS BLOWN OFF HOMES, SHEDS AND OUTBUILDINGS DEMOLISHED, MOBILE HOMES OVERTURNED	24%
F3	158-206	EXTERIOR WALLS AND ROOFS BLOWN OFF HOMES. METAL BUILDINGS COLLAPSED OR ARE SEVERELY DAMAGED. FORESTS AND FARMLAND FLATTEN.	6%
F4	207-260	FEW WALLS, IF ANY, STANDING IN WELL BUILT HOMES. LARGE STEEL AND CONCRETE MISSILES THROWN FAR DISTANCES.	2%
F5	261-318	HOMES LEVELED WITH ALL DEBRIS REMOVED. SCHOOLS, MOTELS AND OTHER LARGER STRUCTURES HAVE CONSIDERABLE DAMAGE WITH EXTERIOR WALLS AND ROOFS GONE. TOP STORIES DEMOLISHED.	LESS THAN 1%

Taken from <http://wxnet4.nbc4.com/chap4/fujita.html>

Continued Tomadoes

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damaged and a path of mature trees leveled. The tornado-producing storm then weakened and moved into Dearborn county, bringing only a brief F0 touchdown in Aurora.

This same storm then moved into Hamilton county, producing a brief F0 touchdown in Addyston before intensifying into the powerful thunderstorm that caused the F3 to F4 tornado damage in the Montgomery/Blue Ash communities.



The picture above depicts the thunderstorm that produced several tornadoes across southeast Indiana into southwest Ohio (passing through the counties of Ripley, Dearborn, Hamilton and Warren). The intensity of the tornado is denoted by the F scale notation.

whole event were critical to our decision making. Radar signatures were not classic and tough to interpret. The reports from Ripley, Dearborn, and

timely and added confidence to what we were interpreting on radar. Once again **THANK YOU!!!**

The spotter reports during this

from Ripley, DeKalb and
Hamilton counties were very

By Greg Tipton

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AMATEUR RADIO OPERATORS HONORED AT MEDIA WORKSHOP IN BLUE ASH, OHIO

On Tuesday, June 29th, the Wilmington National Weather Service held a media workshop at the Blue Ash Red Cross shelter. The workshop was well attended with coverage provided by all four Cincinnati television stations. The audience consisted of amateur radio operators, local and regional Emergency Management Directors (from Ohio and Kentucky) and TV meteorologists from the Cincinnati area.

The workshop had two purposes: 1) to pay tribute to amateur radio operators involved in the tornado sightings on April 9th and 2) to discuss the analysis of the tornado event in meteorological terms.

The workshop started with Meteorologist In Charge Kenneth Haydu. He stressed the importance of amateur radio operators and severe weather spotters. He explained the value they add by providing severe weather reports to the NWS, and how these reports played a major role in the National Weather Service warning process on April 9th.

Mr. Haydu explained the importance of the working relationship between amateur radio operators, weather spotters,

Management Directors and the National Weather Service during the early morning hours of April 9th. He elaborated on the role that each group plays in serving the public and the importance of each group maintaining its credibility. Many lives were saved on April 9th as a result of the working relationship of the aforementioned groups. He thanked everyone who was involved with the Blue Ash tornado.

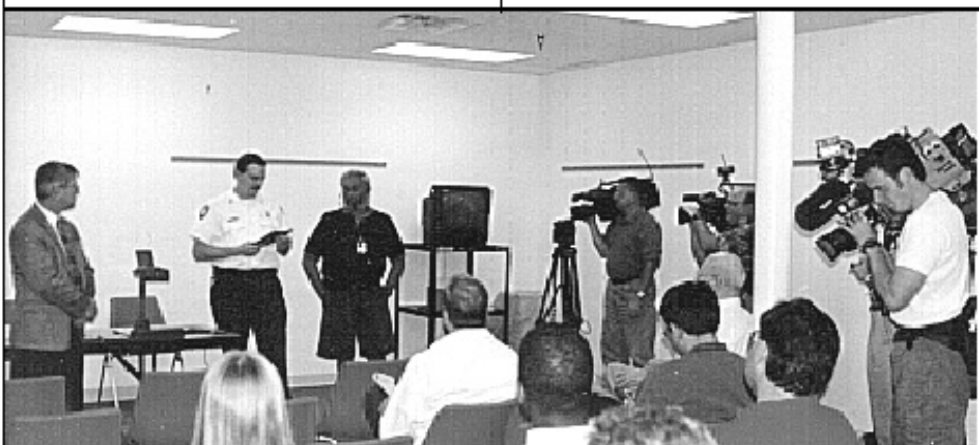
Next, John DiStefano, Science Operations Officer at the Wilmington NWS, gave a one hour meteorological overview of the actual weather events from that night. His presentation centered on radar images. A wind shear zone which developed over the Blue Ash area provided the explosive environment for the devastating tornado.

The workshop concluded with Kenneth Haydu and Mike Nie

(one of the Weather Amateur Radio Network leaders) recognizing the amateur radio operators and weather spotters. Plaques were presented which read: **"In appreciation for the role you played during the April 9, 1999 tornado event. The information provided by you and other amateur radio operators was instrumental in saving lives."**

Receiving plaques were: Steve Lewis (N8TFD), Bruce Goldstein (KC8IYS), Robert Kaegi (KB8TPC), John Westerman (N9VHH), David Rayner (N9JUW), William Stoneking (KB9CLY) and Lynne Stoneking (KB9CJM).

By Kenneth Haydu and
Scott Hickman



TV meteorologists, Emergency

Ken Haydu (far left) and Mike Nie (second from left) present a plaque to a amateur radio operator.

Summer 1999**Continued Wilmington Staff**

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etc.). We continue to strive to produce accurate and timely products. It is our goal to issue the best products and to provide exceptional service to you, the public.

By Scott Hickman



The AWIPS system consists of three computer screens. On the far left, the meteorologist can compose forecasts on the text screen. The other two screens display weather model data, satellite and radar.

A NEW VOICE COMING TO A WEATHER RADIO NEAR YOU!

This summer you will hear a new voice on NOAA Weather Radio. No, it will not be a human voice, but a computer generated voice known as NOAA Weather Radio (NWR) 2000 Broadcast System. The NWR 2000 Broadcast System will automatically translate written National Weather Service forecasts and warnings into synthesized-voice recordings and schedule them for broadcast on NWR. The goal is to have the NWR 2000 Broadcast System fully operational by the mid August. The new voice will take some



NOAA Weather Radio 2000 Broadcast System will begin operations in mid August. The system is designed to send out warnings much faster.

THE NEW YORK PUBLIC LIBRARY ASTOR LENOX TILDEN FOUNDATION

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Summer 1999**WELCOME NEW SPOTTERS!!!**

Welcome to all of the new spotters who joined the program since our last newsletter. We appreciate your interest in the Wilmington NWS spotter program. Your participation is vital to both the Weather Service warning program and the safety of your community. This article will review the types of weather you should report as well as explain the Spotter ID's and updates to our database.

This severe weather season has been generally calmer than usual. When severe weather has occurred, spotters have proven essential to our operations. Spotters in southeast Indiana and southwest Ohio gave us real-time reports which helped the staff alert people in Blue Ash and Montgomery to the violent tornado approaching them (see page 1). Thus, spotters need to always be on the lookout for inclement weather. How do you know when to expect severe weather? On days that severe weather is more likely to occur, we alert our spotters by issuing a severe weather outlook hours before severe weather is expected. This statement is broadcast on NOAA weather radio as well as posted on our webpage. It tells when and where severe weather is most likely to occur and what types of severe weather to expect. If conditions continue to look favorable for widespread severe weather across the area, the

Storm Prediction Center (SPC) will issue a watch. However, much of our severe weather is localized. The one clue to impending development will be statements, short term forecasts or warnings from our office or observing severe weather yourself.

What kind of weather should you report? Tornadoes and

***You are vital to the
National Weather
Service operations.
Keep up the excellent
work!!!***

funnel cloud reports are very important as exemplified by the April 9th incident. How do you know if what you see is a funnel cloud? The most important aspect is *persistent rotation*. Watch the funnel or wall cloud for about 10 minutes to help determine if it is "the real thing." It is also important to report hail one half inch in diameter or greater, downed trees or large limbs and damage to structures. One of the most forgotten severe weather phenomenon is flooding. Flash flooding kills more people each year than any other weather element. If you receive an inch of rain or more in an hour, witness high water on roads or overflowing streams, please report the information to

Once you have witnessed some severe weather, how do you report it? Call the spotter reporting line and give your spotter ID, location and the time and type of event. Be as specific as possible so other reports can get through. Remember, the toll-free number is only for severe weather reports. If you have a question or need general weather information, call (937) 383-0031.

There also will be times when we may need to call you. Someone from the office might give you a call during the times you indicated that you were available. If this happens, they will typically ask for specific information such as how much rain has fallen or if you are experiencing hail or strong winds. In addition, we might call after a storm has moved through your area (even the next day) to inquire about possible damage. These reports are still important as they will help us study the storms and improve for the next event.

Some other questions you may have are: What is the spotter ID? Why do we assign it? The ID helps us to keep track of all the spotters in the 52 counties we service. The first letter is for the state and the next two letters represent the county. The numbers are your individual spotter number and give us a

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Microsoft Corporation
US.

Summer 1999**Continued New Voice**

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getting used to, but the benefits will be substantial.

First of all, the NWR 2000 Broadcast System is fast. It takes between 5 and 15 seconds for the system to transmit a warning. Before, one person was responsible for recording and manually transmitting several warnings which took considerably longer. The public will receive their warnings in a more timely manner. Secondly, the time that was spent transmitting warnings will now be used on critical warning services and forecast duties. This will result in better quality products.

Some may ask, "Why is a computer generated voiced used when some systems use a human recorded voice played back by a computer?" A human voice could be used to record the huge number of words used in the English language. However, if words needed to be added later, the same voice would have to be used. The bottom line: This procedure is just too costly. Consequently, NWR 2000 Broadcast System is cost effective, resulting in savings to the taxpayer.

By Scott Hickman

SKY SCOOP TO BE PLACED ON THE INTERNET

Hello, my name is Scott Hickman. I am the new editor of the Sky Scoop.

As editor of the Sky Scoop, it is my goal to place the newsletter on the internet for two reasons. First of all, it will provide a quicker means for getting information out. Secondly, it will save on postage and printing costs.

If you have access to the internet, please submit your

name and spotter ID at the following web address:

<http://www.nws.noaa.gov/er/iln/spotterid.htm>

Once I obtain your name and spotter ID, you will no longer receive the Sky Scoop via U. S. mail. Check our regular web address at <http://www.nws.noaa.gov/er/iln/iln.htm> periodically for the fall/winter issue.

Thank you and happy reading!

Continued New Spotters

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general idea where in the county you live. Give this number when reporting severe weather as described above unless you are an Amateur Radio operator relaying information over one of the weather nets. In this case, just use your HAM radio call sign and your report will be forwarded to us. Everyone should have a spotter ID card with their name and ID number. If you did not receive one, please fill out the registration form on page 7, mail it to our office and I will get a card to you. Also, if you have not attended a spotter talk in the last two years or if your address or phone number

completed form so I can update your information.

Remember, you are providing a critical service to both the NWS and the people in the area. However, **DO NOT PUT YOURSELF IN HARM'S WAY. PLEASE PUT YOUR SAFETY FIRST.** Do your spotting from somewhere safe and take cover if threatening weather is imminent. Thank you again for your willingness to participate in the Skywarn program.

By Shannon White

your address or phone number
has changed, please send in a

1999 WILMINGTON NWS SKYWARN SPOTTER UPDATE

Name (s) _____

Wilmington Spotter ID (s) _____

Do you need a new ID Card? _____ If so, who? _____

Address _____

street address and/or PO Box

apt #

city

state

zip

Telephone _____ (____) _____

County of Residence _____

Distance and Direction from the Nearest City or Town and/or nearest state or county road.

Is this a new address? If so, what was your previous address?

Date of talk last attended _____

Affiliation, if any?

Emergency Management _____

Amateur Radio _____

Radio ID _____

Law Enforcement _____

Fire/Rescue Squad _____

Other _____

1. May we call you for verification of suspected severe or hazardous weather events?

*Please give a time duration, otherwise we will assume that we can call anytime day or night.

Times: From _____ AM PM to _____ AM PM

2. Do you own any weather observing equipment? _____

Wind Gauge _____

Rain Gauge _____

Thermometers _____

Other _____

Signature _____ Date _____

